

## ABSTRACT OF THE DISCLOSURE

A vehicle speed measuring apparatus includes front and rear wheel side vibration detection sensors for detecting vibrations from a road surface through tires, an input section through which the vibration detection sensors input their detection values, and a processing unit for calculating vehicle speed of the vehicle based on a change pattern of the detection values inputted. When the detection values are inputted through the input section, the processing unit feature extracts a change pattern of the detection values for the respective front and rear wheel sides by excluding inherent tire influences on the detection values, executes pattern matching between the front and rear wheel sides on the basis of the feature extracted change patterns of the detection values, and obtains a time difference from a coincidence of the change patterns, and thereafter calculates vehicle speed based on the time difference and a reference distance such as a wheel base.